

HIGH-FREQUENCY OSCILLATION APPARATUS,  
RADIO APPARATUS, AND RADAR

ABSTRACT OF THE DISCLOSURE

A high-frequency oscillation apparatus wherein an oscillation signal output from a voltage controlled oscillator (VCO) is transferred through a transfer line to a resonator and the resonator is excited. The resonator is coupled with a second transfer line and an RF signal having a level corresponding to the frequency of the oscillation signal is transferred through the second transfer line. When the resonant frequency of the resonator is set to a frequency higher than the oscillation-frequency modulation range of the VCO, the oscillation frequency and the RF-signal level have one-to-one correspondence. A detector detects the RF signal and outputs to a control section. The control section compensates a control voltage signal applied to the VCO according to the detected-signal level, and outputs the control voltage signal to the VCO to compensate the oscillation signal of the VCO.